June 29, 6 p.m.—flowers opening, bees active.

" 29, 6 " —bees less active; sunset at 8.40.

" 30, 7-8 a.m.—a few bees.

" 30, 5 p.m.—no flowers open, several bees at old ones; old flowers removed from three plants.

" 30, 6 " -5, 5, and 6 flowers open on the 3 plants; bees active.

" 30, 7 " —9, 18, and 13 flowers open on the 3 plants.

" 30, 8 " -2, 6 and 2 flowers open on the 3 plants.

" 30, 9 " -0, 0 and 0 flowers open on the 3 plants; no bees.

This shows clearly that the main period is from one to two hours before sunset. Some plants of *Anogra pallida* were watched at same time. Three flowers opened at 9 p.m., but no visitors were seen in the next half hour. One specimen of *Autographa falcifera* Kby., apparently the moth referred to (Ent. News 31:43), was taken at *Gaura* in the evening, two of *Rhodophora florida* Gn. at *Anogra* in the morning (det. by Henry Skinner and deposited in the Acad. Nat. Sci. collection).

A NEW GENUS AND A NEW SPECIES OF SPIDERS IN THE GROUP PHRUROLITHEÆ.

BY RALPH V. CHAMBERLIN, Cambridge, Mass.

Phruronellus, gen. nov.

Proposed for a group of species heretofore included in *Phrurolithus*. The males are characterized by having near the proximal end of the femur, or sometimes at the middle, beneath, a conspicuous but short apophysis which is usually bent at the end, in place of the simple swelling at the distal end of femur present in species of *Phrurolithus* sens. str. Also by having the tibial apophysis with two distinct prongs united at base. The cephalothorax is more nearly circular in outline, the head region less narrowed, and differing in being uniformly dark

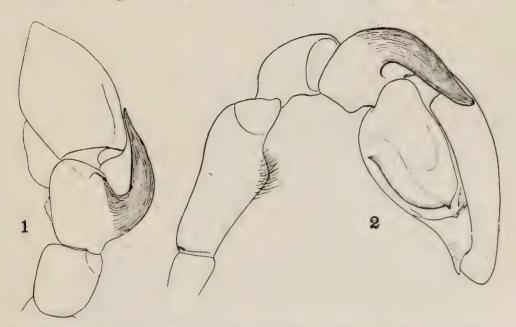


Fig. 1. Phrurolithus parallelus, sp. nov. (1) dorsal view, (2) sublateral view of male palpus.

shiny chestnut or blackish, without any definite markings such as are present in *Phrurolithus*. First legs without the tibiæ conspicuously black, as in the latter March, 1921

genus. Femora usually darker than distal joints, especially on first two pairs of legs. Abdomen also dark above with markings obscure or absent.

Genotype.—Phrurolithus formica Banks.

Other known species in this genus are pugnatus (Emerton) and similis (Banks), the Phrurolithus affinis of Banks being the same species as the pugnatus of Emerton. The North American species remaining in Phrurolithus sens. str. are alarius (Hentz), borealis Emerton, minutus Banks, parcus (Hentz), probably britcheri Petrunkevitch, which species is unknown to me, and the new species described below.

Phrurolithus parallelus, sp. nov.

Male.—Carapace yellow, lateral margins black, sides a little dusky, with deeper branched lines as in borealis. Legs yellow excepting the first pair which have the femur, patella and tibia, excepting the light distal end of latter, darkened, the tibia darkest. Sternum yellow. Abdomen above dark, almost black, without markings, pale beneath with two darker lines united in front of spinnerets and extending forward to middle. Abdomen narrow with anterior corners angular and the margin between them but little convex, the sides subparallel. Femur of male palpus with a rounded swelling beneath at distal end covered with stiff hairs, this not limited on ectal side by a non-pilose, keel-like elevation such as is present in alarius. Tibial apophysis geniculate at base as usual, rather short, of gradually decreasing width to acute apical part, the latter not bent or twisted. (See Fig. 1.)

Length, 2.3 mm. Length of cephalothorax, 1 mm.; width .86 mm. Length of tib. +pat. IV, 1.4 mm.; of tib. +pat. I, 1.23 mm.

Locality.—Washington, Wawawai. One male.

NEW PARASITIC HYMENOPTERA OF THE SUBFAMILY ANTEONINÆ (DRYINIDÆ).

BY F. A. FENTON, Ames, Iowa.

The Anteoninæ¹ comprises a small but well-differentiated group of hymenopterous insects parasitic on leaf and treehoppers (*Homoptera*). One of the striking characteristics of these insects is the fact that with the exception of one tribe, all the females have the anterior tarsal joints modified to form a chela or grasping organ. In the more specialized genera there is a marked sexual dimorphism, the females being wingless and ant-like.

During the summer of 1919 the following species were collected or reared from leafhoppers and have been carefully compared with related species and are considered new.

Epigonatopus americanus, n. sp.

Female.—This species differs greatly in colour from solitarius Perkins and in body sculpture from fallax Perkins. Length 2.5–2.75 mm. Black except tips of coxe, trochanters, generally tibiæ and tarsi, basal three to four antennal joints, and face below base of antennæ, which are testaceous. Antennæ twice length of head. Vertex of head flat; surface of head and prothorax

1. This group has been variously given the rank of family (Dryinidæ) and subfamily (Anteoninæ) by different writers. It is also included by some in the superfamily Proctotrupoidea and by others in the Vespoidea.

March, 1921